1: Hocart Y-5 (ca. 1920) 1929 OQ6 Lau OQ6
Lakemba

342 nut leaves however, rot quickly, so the ridge of big houses is packed with small leaves, stamped and pinned down, kept in position by winding in zigzag fashion round the pins from end to end a certain creeper. In this style the creeper is the *teviti.*

The walls are made of reeds in a style called *lotoa,* a Tongan word *loto,* interior, and *a,* fence). In the islands where there are no reeds, thin walls are made of plaited coconut leaves, described as "plaited walls."

In determining the length of a house only the central part is measured, leaving out the rounded ends. The length is reckoned in fathoms.[18] A five fathom house will have about four main posts and six tie beams. Of old, some houses were ten to twenty fathoms long. Joshua's house was 38 feet long; an average house about 21 feet.

COIR ROPE

283 Coir, called *mangimangi,* is made of the fiber from a special kind of coconut. The husk is beaten out so as to separate the fibers which are then cleared of all adhering particles. The fibers are generally baked which gives them a deep reddish color; but raw coir is used in designs to introduce a light brown color.

Plaited coir is prepared in the following manner:

Several fibers are rolled together on the knee, or else kept together by winding a fiber round them. A number of these bundles are plaited in three strands. In the Fijian method the strands are stood up; but in the Tongan method they are turned down after each plait. The bundles or tufts are not inserted at definite distances from the end of the cord, but inserted according to the worker's judgment to secure uniform thickness, not an easy matter. Old and industrious men often plait at little meetings and in the family circle.

Some coir rope is dyed black for working into designs. This is done by beating a banana stump, squeezing out the juice, boiling the coir in it and covering it with leaves of *vunga;* then stamping it in a kind of black mud called *somo.* The coir so prepared is called *somo.*

The plaited coir is made into balls all of one color, according to the Ono style, which is followed in Mothe; according to the Thithia fashion it is made into rolls in which the black and the red form alternate zigzags all round; the same style is followed in Oneata and Naiau. Ono and Thithia are the great places for coir in Lau; Mothe also to a certain extent.

284 The Lauans boast that coir rope is far superior to nails, for it never rots whereas nails rust. All beams are bound together by winding coir string round their joint, and for purposes of ornament black and brown are used, sometimes also yellow, that is raw, coir. This technique is called *i lowalawa,* and is said to originate from Tonga, and indeed most of the

[18] The Fijian fathom is a variable measure according to the size of the man. The last two measurements are actual measurements taken by me.

2: Thompson E-5 (1933-1934)1940 OQ6 Lau OQ6
Kambara

241 been the first vegetable to be planted on the limestone islands. Old people say that it was there before the Tongan conquest, but that gardening began with the coming of the Tongans. *Kawai* is esteemed on the limestone islands. It grows wild on Mothe and Namuka, but is cultivated on Fulanga, Kambara, and Ongea.

Natives say that in the past a feast was held in the village after the planting of the first yam.

Sugar cane

Sugar cane grows on some islands of Lau. Mothe has little cane and does not plant it. About two square meters of cane land is found on Kambara. Occasionally the cane is cut down, but it grows again. Fulanga and Ongea grow no sugar cane. (For sugar cane on Lakemba see Hocart, 15, p. 107.)

Maize, cabbage, onions

There are a few patches of maize (*siliva*) on each island. One or two ears are often seen hanging in the house to be planted in October or November. When the ears ripen in the months of February and March, they are brought home by men and usually eaten raw, but Lauans do not especially like corn.

Chinese cabbage (*kapetchi*) is well liked, but is planted in very small quantities on some islands.

Lauans like onions and plant a few at any time of the year.

FRUIT TREES

Coconut

245 The most common varieties of coconut are the following: *niu uai* (water coconut) also called *niu ni Tonga* (Tongan coconut), *niu rerenga* (yellow coconut), *niu ndrau* (one *hundred coconuts*), *niu ni mangimangi* (sennit coconut), and *niu leka* (short coconut). The *niu uai* grows largest of all coconuts but does not have a fine flavor. It has a thick husk and shell. The plantations, running along the beach wherever the cliff retreats, have few *niu uai*, because this variety has not been known long in Lau. *Niu rerenga* is so called because the leaves are yellow green. The flesh of the *niu rerenga* is especially white. *Niu ndrau* grow in one close cluster. They are small (about the size of a man's fist), but have the finest flavor, are excellent for drinking, and have a thin husk and shell. *Niu ni mangimangi* is considerably longer than any other variety, therefore it furnishes the longest and also the toughest fiber for sennit. The *niu leka* tree grows only up to 5 meters, and yields a good crop. It is found only in the villages or in young plantations.

[283]

Coconuts are planted at any time of year, usually at the side of or behind a house. The nut is covered with a little soil, and when the sprout is about 40 cm. high the nut is transplanted to a spot in a coconut grove where a tree

2: Thompson E-5 (1933-1934)1940 OQ6 Lau OQ6
Kambara

342 A man may either select and cut the timber for his house himself, or
313 make arrangements to have it done by his own village or a related village. If he cuts it himself, he fells the first suitable timber he sees for any part of the house and leaves it until he can get help to haul it to the house site. To
[431] procure the help of a village he presents one or more whale's teeth or property such as mats and tapa to the ranking men of the village with his request. At the appointed time the necessary house posts are assigned to groups of men who select, fell, and transport them. The natives use imported metal ax blades, hafted like adzes, for felling timber. Long, heavy beams are carried on the shoulder. Hauling the timber takes two or more days, and during this time the owner provides the daily feast (*i nggaravi ni takathu ai vale*) for the workers.

342 The quantity of sennit needed for a house depends on the size of the
● 283 house and the amount of ornamental lashing to be executed, but for even a small house a large quantity is necessary. An industrious man on Fulanga who was building a house 3.5 fathoms long, 2 fathoms and 2 spans wide, and about 3 fathoms high, estimated that he needed 6,000 fathoms of sennit. This he made in his leisure time, mainly in the evening. To complete such a task
[555] takes from six months to one year of steady work. Well-executed ornamental lashing is very much admired by the natives and adds considerably to the owner's prestige. Frequently members of the owner's clan contribute sennit for the house.

342 After the timber has been hauled to the house site, it is shaped and smoothed (*sasau kathu*) by the owner or by the carpenter with metal bladed adzes of various sizes. Inasmuch as the Lauans take great pride in smooth, thick house posts this is slow, careful work.

When the parts of the main framework are ready to be erected, the sennit finished, and the harvest ripe, the day for erecting the main framework is set by the owner and the village headman, who announces it to the village. All the able-bodied men in the village help in the actual work. The old men, giving advice and telling stories, sit in a group under a temporary coconut-
[272] leaf thatched pavilion (*vakatu noloa*), near the house site. Properly, kava should be provided by the owner; but on islands where kava is not raised it is often omitted.

On this first day of the actual house building the largest feast of the series is held. It is provided and prepared by the owner and his relatives. The men work on the ovens, and the women fish and boil the food. The women take no part in the actual house building. A small feast (*i takitaki*) is served in the morning at nine or ten o'clock. The main feast (*mangitchi ni kali vaka vale*) is served at four or five in the afternoon. It is distributed by the old men under the direction of the chief of the ceremonial ground or the

2: Thompson E-5 (1933-1934)1940 OQ6 Lau OQ6
Kambara

343 with coconut leaves. Hibiscus bark is used for lashing. The lean-to roof,
235 also thatched with coconut leaves, is supported by diagonal sticks running from a rod, set on three forked stakes on one side of the house, to the ground on the other side.

Inverted, discarded dugouts are also used for chicken coops, especially for breeding nests.

Sennit

283 Sennit (*mangimangi*) is made from coconut of the largest type called *niu mangimangi* (sennit coconut). The nut grows to 55 cm. long. No other types of nuts are used because their fiber is too short and too brittle. Nuts in the half ripe state (*mbu vinaka*) are husked on a husking stake into five equal longitudinal segments. The segments of two nuts are placed in one pile and thus can be counted easily. Stones are heated in an earth oven, spread out with a stick, and the husked segments of 100 to 200 nuts are placed on the stones. The husks are then covered with green leaves and earth. The husks may be left in the oven from three to 21 days. When needed, they are taken out of the oven through a small opening on one side, which is closed after the desired number of segments has been removed. Each segment is freed of its outer husk by hand and then is placed back upward on a block of wood (*rumbi ni mangimangi*) and beaten with a wooden mallet to remove bits of flesh, dirt, and short fibers. The clean, long fibers are allowed to dry in the sun for about three hours. The good fiber is reddish in color. When the dry fiber is pulled apart by hand, it is ready to be braided as follows:

> The braider seats himself cross-legged with a pile of fiber at his side. He takes a little fiber, places it on his upper leg, and with the palm of his hand rolls it into a strand (*ndua i nggilinggili*). The amount of fiber in the strand determines the thickness of the sennit braid. When he has a sufficient number of strands he begins to braid.

The braid is rolled into coils up to 1,000 fathoms long and is stored or exported.

Frequently, instead of steaming the husks in the earth oven, the segments are boiled (in salt or fresh water) in old kerosene tins for several hours. Then they are beaten and dried. They turn a reddish white color, and are strong and tough. This method was used frequently when the copra industry was at its highest in Lau and kerosene tins were readily available.

283 White sennit, made by soaking the husk segments in salt water for about
386 two months, is neither stronger nor more brittle than baked sennit. Black
[824] sennit—which is recent in Lau, according to the natives—is produced by boiling a coil of baked sennit with leaves of *sinu (Excoecaria agallocha* or *Phaleria disperma), kalatchimbuthi (Acalypha insularis), tatavola*, and *mbele*. The natives say that if any one of these leaves is omitted the dye is not fast.

2: Thompson E-5 (1933-1934)1940 OQ6 Lau OQ6
Kambara

The coil is boiled in the dye mixture for about 10 hours and then soaked in a container for about 12 hours. It is then left for about 24 hours in a container with soft black mud, washed in fresh water, and hung out in bundles to dry. When boiled the black dye fades slightly. Yellow sennit is made by boiling a coil with scraped *kura* roots for two hours.

283 ● 386

Canoes

I witnessed the process of construction, of sailing, and of paddling canoes on the islands of Kambara, Fulanga, and Ongea. Information concerning navigation was obtained on six interisland canoe trips in good and bad weather over a distance of 200 miles. Information concerning the double canoe was obtained from many old informants who had participated in their building and sailing. Much of it was furnished by Tatchini, the *lemaki* carpenter of Kambara. No complete double canoe is found in Lau today. But on Fulanga I examined parts of a small *sauthoko* constructed by Mathiu, the carpenter of Nasava, a chiefs' carpenter clan of Muanaithake, and on Levuka, Lakemba, a model *sauthoko* constructed by the same carpenter.

501

Two types of canoes, the single sailing canoe (*thamakathu*; pl. 5, *A, B*) and the paddling canoe (*wangga vothe*) are still made and in constant use in southern Lau. Both have single indirectly attached outriggers. The sailing canoe is a five-piece, completely decked canoe equipped with mast and lateen sail. The paddling canoe is either a simple dugout or a dugout with decked washstrakes. Only large sailing canoes are used outside the reef.

Informants say that formerly an outrigger canoe, called *ndavilai*, was also made. It resembled the *wangga vothe* but head and stern were of equal size and shape.

Two types of double canoes (*ndrua*), the *sauthoko* and the *tambetembete*, were formerly built in southern Lau. The *sauthoko* consisted of two built-up, decked canoes; the main canoe (*kata*), and the balancing canoe (*thama*), which served as outrigger. The *tambetembete* was a plank canoe with a keel said to have been introduced and built by the *lemaki* carpenters and the Tongan carpenters, who came to southern Lau for greenheart timber. Double canoes were used in interisland voyages in Fiji and between Fiji and Tonga.

Informants say that a raft (*ulatoka*), composed of logs lashed together with sennit, was formerly built to carry heavy loads. The *ulatoka* is mentioned by Williams (27, vol. 1, p. 76), and a model of an *ulatoka* in the Fiji Museum has been described by Hornell (16, p. 332).

[505]

Canoe making is today, as in the past, the most important industry in southern Lau because hard greenheart timber, used for hulls of double and large single sailing canoes, grows abundantly only on the forested, limestone island of Kambara and to some extent on Fulanga, Ongea, and Wangava.

396

2: Thompson E-5 (1933-1934)1940 OQ6 Lau OQ6
Kambara

396 [284] Stringers (*kaiakisa*) are placed above the booms and securely lashed to them with sennit at every intersection. This lashing must be renewed often. The innermost stringer is thicker and stronger than the rest.

Deck. Breakwaters are inserted between the ends of opposite washstrakes. A deck of planks, built over the boom, covers the space between the washstrakes and extends beyond them on both sides. The rectangular hatch at each end is closed with planks in rough weather. Hourglass-shaped holes for the scull (*i sua*) are cut in the deck between the hatches and the outrigger. The scull is a long, slender oar, two thirds of which is manipulated below the deck. A well equipped sailing canoe has two sculls.

Two struts, one lashed to the fore corner of the deck platform opposite the outrigger, the other to the aft corner, extend to and are lashed to the tip of the head and stern boards respectively. On large, well-built canoes a low wooden rail (*koli*) is built along the edge of the deck opposite the outrigger side.

Mast, rigging, and sail. The mast (*i vana*) is a straight pole of *ndamanu* wood which tapers toward the head. Its length equals at least half the length of the canoe. It is topped with a masthead of greenheart. Either of two types of mastheads are used. One has a mast-prong, shaped like a crab's claw, [177] through which the halyards (*vakavakarewa*) are rove. The other has a truck (fig. 8) which the natives say is recent. Trucks, however, are shown by Williams (27, vol. 1, fig. opp. p. 88). The truck aperture is called *nggara ni vakavakarewa*. The mastheel is either stepped in a circular hollow cut in the deck amidships or it is pivoted in a solid socket (*vunga*) fitted to the deck at the same place.

[439] ● 283 The rigging is usually imported rope, which is considered stronger than the native twist. The standing rigging consists of two shrouds, one forestay, and one backstay. The upper shroud (*i lomba levu*) and the lower shroud (*i lomba lailai*) run from the masthead to the central boom above the float. The forestay (*i tuku ni mua levu*) and the backstay (*i tuku ni mua lailai*) run from the masthead to the stay holes (*nggara ni tuku*) on the edge of the head and stern boards.

A curved mast-shore (*vangga loa*) extends from the lower part of the mast to the outer part of the central boom.

[285] The sail (*i latha*) is of the Oceanic lateen type. It is made of strips of pandanus matting sewn together with a sail needle (*saulatha*) threaded with sennit. Informants on Kambara say that besides pandanus, *kuta (Elaeocharis articulata)* was formerly used for making sails. *Kuta* does not grow on [439] Kambara. It was brought in long rolls about 65 cm. wide from Viti Levu and cut and sewn into sails on Kambara. The margins of the sail are turned down and sewn with a bolt rope composed of sennit. The head and foot

2: Thompson E-5 (1933-1934)1940 OQ6 Lau OQ6
Kambara

NETTING AND ROPE

FISHLINES

The process of making fishlines was witnessed only on the island of Fulanga. Fishlines are made only by women in Lau, but men occasionally help to procure from the bush *ronga* bark, from which the lines are made. The bark is stripped from the *ronga* branches in pieces from 2 to 3 meters long and rolled into coils (*pupu*), a process called *thimbini*. The next day the coils are unrolled and the outer bark is stripped off, a process called *kulina*.

283

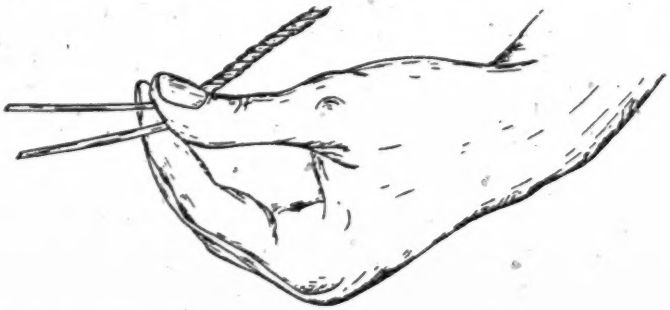

FIGURE 19.—Fishline technique. First step in rolling shreds of *ronga* bark into two-ply twist: two strands of two shreds each are held, one end of each strand between thumb and first finger of the left hand, so that thumb separates strands.

The inner bark (*leve ni kulina*) is sunned for several days until it is dry and white, a process called *singani*, and then it is hung indoors until needed. Before shredding the inner bark it is placed in the lagoon and scraped with a *kuku* shell, a process called *kalui*. It is dried in the sun again and then softened and scraped into shreds with a *ndamba* shell. To roll the shred into a two-ply twist, a woman proceeds as follows:

[516]

She sits with knees straight and legs crossed left over right in front of her. She places a bundle of shreds in her lap, then takes two strands of two shreds each and holds one end of each strand between thumb and first finger of the left hand, so that the thumb separates the strands (fig. 19). With the right hand she rolls each strand into a ply on the bare calf of her left leg. One movement away from the body usually suffices. With her right hand, she separates the two plies from her left thumb to the ends. Then she rolls the two plies on her calf into a two-ply twisted cord, with one movement away from her body and another toward it. This completes about 7 cm. of cord. She separates the two plies at the unfinished end of the line and repeats the process until one ply becomes short and thin. Then she adds another shred of bark from the pile in her lap by placing it beside the weak ply and holding the two between thumb and first finger. With her right hand she pulls the new shred toward the unfinished end of the cord until she holds it with her thumb about 3 cm. below the upper end. She turns this upper end down along the second ply (which has not been reinforced) and proceeds.

2: Thompson E-5 (1933-1934)1940 OQ6 Lau OQ6
Kambara

283 The two-ply twist is used as a fishline and in making fishnets. It is made
227 in several degrees of thickness. Fishlines made of the inner bark of the *ronga* are said to be stronger than imported lines.

FISHNETS

286 The process of making a fishnet (*lawa*) was witnessed only once, in the village of Naivindamu, Fulanga (pl. 3,*B*). The netting technique, as illustrated in figure 20, is described as follows:

> A two-ply twist made of the inner bark of the *ronga* is wound on a shuttle (*i sikani*) 42.5 cm. long, composed of *mbau thama* wood. A mesh gauge consisting of a smooth, flat board (*papa*) is used. Gauges are of various widths depending on the size of the mesh desired. To make a net 6 meters long and 2 meters wide, a gauge 3 cm. wide is used. The mesh at the end of the first row is hooked by means of sennit to the big toe.

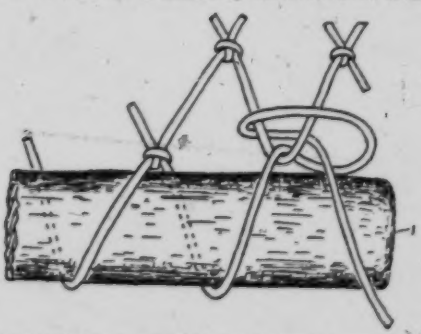

FIGURE 20.—Fishnet technique: two-ply twist is knotted around mesh gauge (1).

TURTLE NETS

Turtle nets, called *lawa ni vonu*, are made of sennit. The only one in southern Lau is kept on the northeast shore of Sauvanaroa, the Wangava lake. It is about 30 fathoms long and 8 fathoms wide. It is made of sennit knotted into a mesh 30 cm. square. Ropes of hibiscus bark form the border. Along
[824] the entire length of one side of the net, dried halved *vutu* (*Barringtonia*) nut shells are fastened side by side as floats. The other side is anchored with stones on the lake bottom. When not in use the net is hung across a rod set on two forked stakes.

ROPE

283 A three-ply pandanus braid, called *i ndreave*, is made and used by women only. Five or six strips of pandanus, each about 1 cm. wide, form a ply. Three plies are held by the foot while braiding and loose ends are cut with a knife. The rope is used for binding baskets to the back or for tying bundles.